NOTES ON A CHALCID (Syntomaspis druparum Boh.) INFESTING APPLE SEEDS.

By CYRUS R. CROSBY, Cornell University, Ithaca, N. Y.

(Abstract.)

On July 27, 1906, while examining some crab apples at Ithaca, N. Y., for the apple maggot, Rhagolitis pomonella Walsh, the writer noticed that many seeds contained a small Hymenopterous larva. It occupied only a small portion of the interior and was evidently devouring the kernel. During the remainder of the summer the seeds were examined at frequent intervals, and it was found that the larvæ gradually increased in size while the kernel slowly disappeared until in September the larva alone occupied the cavity of the seed.

Egg-laying was not observed, but as the female is provided with a long ovipositor it is probable that the eggs are inserted directly into the young seed while the apple is very small. The full-grown larva passes the winter in the seeds and in May pupates. The adults appeared in June. Specimens were sent to Dr. L. O. Howard who determined them as probably Syn-

tomaspis druparum Boh.

An account of the occurrence of this insect in Crimea where it infests the seeds of the wild apple has been published by Sigismond Mokshetsky (Ztschr. Wiss. Insbiol., II, pp. 300-302, 1906) under the name of Syntomaspis pubescens Forst. I have compared adults reared at Ithaca with specimens kindly sent me by Mokshetsky and find that they are without doubt the same species.

This insect is of interest not only on account of its being the only representative of the genus known to be phytophagic in the larval state, the other species being parasites, but also because it may possibly become an important horticultural pest. It is generally distributed in New York State and infests the native wild apple, Malus coronaria, as well as a number of cultivated varieties.